



Gynecological & Obstetrical Tools

- ❖ **Instruments**
- ❖ **Histosalphingogram (HSG)**
- ❖ **Ultrasonography**
- ❖ **Jars**

Prepared by:

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بسم الله الرحمن الرحيم

الحمد لله على توفيقه وامتنانه ، وعظيم نعمه ، وتتابع إحسانه ، أحمدده جل في علاه على ما منّ به وأكرم ، وأشهد أنّ لا إله إلا الله وحده لا شريك له شهادة عبدٍ مُقرّ تجاه ربه بالتقصير والكنود ، وأشهد أنّ سيدنا محمداً عبده ورسوله المبعوث بالنور والهدى ، صلى الله عليه ، وعلى آله وصحبه ، ومن اهتدى بهديه ، واقتفى أثره إلى يوم الدين.

إخوتي في الله أنى أحبكم في الله وأسأل الله جل وعلا أن يجمعنا بهذا الحب في ظل عرشه يوم لا ظل إلا ظله.

أما بعد،،،

فإني أقدم لكم هذه الورقات المختصرة التي جمعتها تنظيماً وترتيباً واخراجاً لعملى "التولز" فى مادة النساء والتوليد ، حريصاً على أن تخرج فى أحسن صورة وأن تكون أيسر فى الحفظ والمذاكرة.

فنسألك اللهم أن تجعل عملنا كله صالحاً واجعله لوجهك خالصاً وأن تنفع به وأن تكون عوناً لكل طالب ، سبحانه ولى الهداية والتوفيق.

وعلى من وجد عيباً أو نقصاً أن لا يتأخر عن الارشاد والبيان ، وله من الله الأجر والمثوبة.

أحمد مليحة

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1- INSTRUMENTS



The Obstetric Forceps

1. Types:

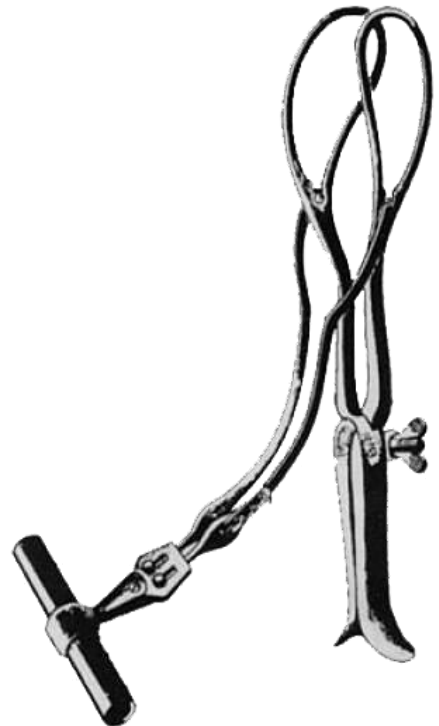
- 1) Long forceps (with shank *وصلة*)
 - a. Straight
 - b. Curved
 - i. With axis traction piece (Barnes-Neville-Simpson, Milne-Murray's)
 - ii. Without axis traction piece (*العادي*)
- 2) Short forceps (without shank)
 - a. Straight
 - b. Curved (Wrigley's forceps)
- 3) Kielland's forceps



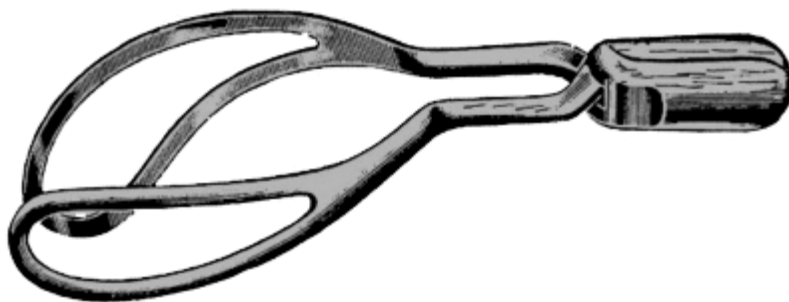
Barnes-Neville-Simpson Forceps
With axis traction piece



Kielland's Forceps

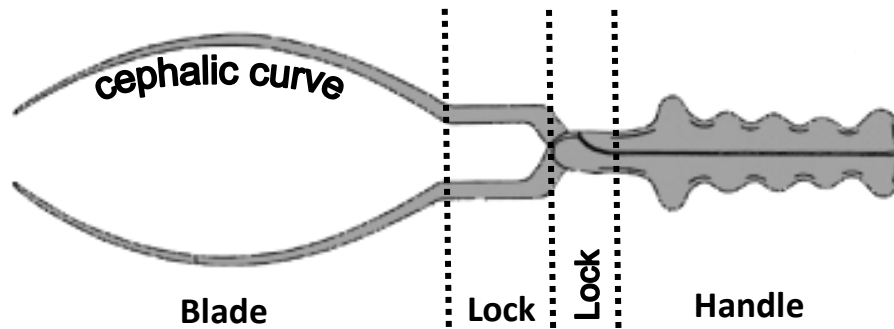


Milne-Murray's Forceps
With axis traction piece



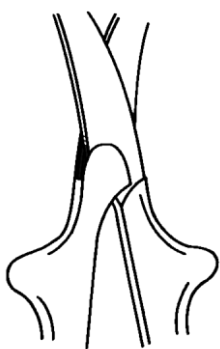
Wrigley's Forceps

2. Description of long curved forceps



3. Types of forceps lock:

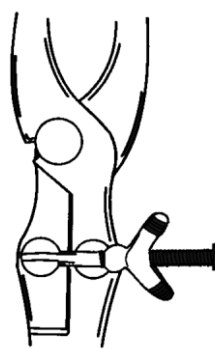
- 1) English (عاشق ومعشوق)
- 2) French (بمسمار)
- 3) German (mixture of English and French)
- 4) Sliding (in Kielland's)



(a)



(b)



(c)



(d)

4. Actions of forceps:

- 1) Traction of head which is the main function.
- 2) Rotation of head by kielland's forceps.
- 3) Compression of head.
- 4) Lever action to the head in C.S.
- 5) Protection of fetal head from compression in the birth canal.
- 6) Stabilizing the head in craniotomy.

5. Indications to use forceps:

- 1) Maternal indications:
 - a. Maternal distress:
 - Rapid pulse over 100 b/m.
 - Temperature over 38° C.
 - Signs of dehydration.
 - b. Maternal Disease: *which need to shorten the second stage*
 - Heart disease with pregnancy.
 - Pulmonary TB with pregnancy.
 - Eclampsia.
 - c. Maternal conditions:
 - Lower segment C.S. scar.
 - Epidural anaesthesia.
 - Paraplegia.
- 2) Fetal indications:
 - a. Fetal distress.
 - b. Prolapsed pulsating cord.
 - c. After-coming head of breech delivery.
 - d. Premature baby.
- 3) Prolonged 2nd stage of labor:
 - a. fault in power: uterine inertia and contraction ring.
 - b. fault in passenger: O.P. position, large fetus and malpresentation.
 - c. fault in passage: rigid perineum.
- 4) During C.S.: as lever action for the head.

6. Conditions to be fulfilled before using forceps:

- A:** anaesthesia: either general or epidural.
- B:** bladder and rectum must be evacuated.
- C:** complete aseptic condition.
- D:** Dilatation of cx. (fully cx dilatation).
- E:** episiotomy.
- F:** favorable presentation (vertex with O.A).
- G:** good uterine contraction.
- H:** head in engaged.
- M:** membranes are ruptured.
- N:** no pelvic outlet contraction.

7. Contraindications for forceps application:

- 1) Incomplete cx. Dilatation.
- 2) Unfavorable presentation: brow.
- 3) Decreased uterine contraction.
- 4) Non-engaged head.
- 5) Pelvic outlet contraction.

8. Types of forceps operations:

- 1) High forceps: application of forceps before head engagement.
- 2) Mid forceps: application of forceps when BPD is engaged but didn't pass the plane of ischial spines.
- 3) Low forceps: application of forceps when BPD is below the level of ischial spines. (Wrigley's forceps)
- 4) outlet forceps: application of forceps when head on perineum.

9. Complications of forceps delivery:

a. Maternal:

- 1) Birth tract injuries (perineum, vulva, cx, vagina, LUS, bladder, rectum).
- 2) Traumatic postpartum hemorrhage.
- 3) Pelvic bones injuries.
- 4) Pelvic nerves injuries.
- 5) Remote complications (prolapse, stress incontinence, cx incompetence)

b. Fetal:

- 1) Intracranial injury and hemorrhage.
- 2) Asphyxia due to cord compression and ICH.
- 3) Cephalhematoma.
- 4) Fracture skull.
- 5) Nerve palsy (facial nerve and brachial plexus)
- 6) Face and scalp abrasions.
- 7) Remote complications (mental retardation and cerebral palsy)

10. Technique of forceps delivery:

- 1) Application.
- 2) Articulation.
- 3) Rotation.
- 4) Traction.
- 5) Removal.
- 6) Exploration.

11. Failed forceps:

Definition: unsuccessful attempt to deliver the head by forceps.

Causes:

1) Maternal:

- | | |
|--------------------------------|--------------------------------|
| - Cx is not fully dilated. | - Full bladder of rectum. |
| - Pelvic contraction or tumor. | - Contraction ring above head. |

2) Fetal:

- | | |
|------------------------------------|--------------------------------------|
| - Malposition and malpresentation. | - Cephalopelvic disproportion (CPD). |
| - Not engaged head. | - Congenital anomalies. |

3) Iatrogenic:

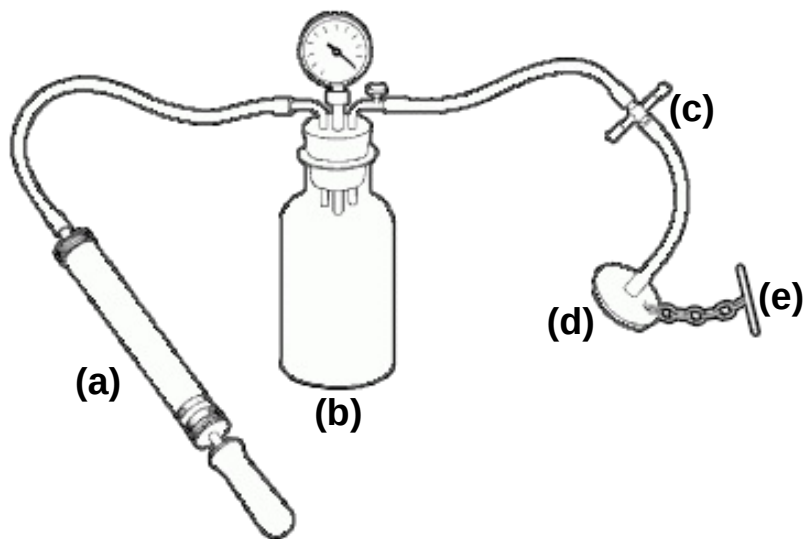
- | | |
|-----------------------------------|--------------------------------|
| - Wrong technique of application. | - Wrong direction of traction. |
|-----------------------------------|--------------------------------|

The Vacuum Extractor (Ventouse)

1. Description of ventouse:

It's formed of 3 parts:

1. Suction cup: with varying diameter (4, 5, 6 cm) and knob on outer surface of cup pointed to occiput to know whether rotation occurs or not during application.
2. Traction system: chain and handel.
3. Suction system:
 - a. Suction tube attached to cup formed of rubber.
 - b. Suction bottle with monometer (-ve pressure) and release valve.
 - c. Suction pump to create -ve pressure either manually (hand pump) or electrically (electric pump).



(a) Hand pump (b) Suction bottle (c) Rubber tube
(d) Suction cup (e) Traction chain

2. Technique of ventouse extraction:

- 1) No or local anesthesia.
- 2) Sterilization and toweling.
- 3) Choosing a suitable cup size.
- 4) Cup is introduced obliquely and guided over head to lie near occiput to maintain flexion of head during traction, and knob should be directed towards the occiput.
- 5) PV is done to exclude any genital part being caught by the cup.
- 6) Suction is started gradually and slowly to create artificial caput (chignon).
- 7) Gentle traction and intermittent with the uterine contraction in the direction of birth canal for not more than 20 minutes to avoid scalp necrosis.
- 8) Release the -ve pressure when the head is delivered.

3. Indications to use ventouse:

Same indications of forceps but not used with premature babies, breech or face presentations.

4. Contraindications of ventouse:

- 1) Cephalopelvic disproportion.
- 2) Face presentation as it may lead to rupture globe.
- 3) Premature babies for fear of I.C.H.
- 4) Aftercoming head of breech delivery.
- 5) Severe fetal distress as ventouse is time consuming.

5. Advantages of ventouse over forceps:

- 1) Can be used with local anesthesia or even without it.
- 2) Can be used before cervical dilatation.
- 3) Can be used for rotation and traction in single application.
- 4) Less traumatic to mother.
- 5) Less traumatic to fetal head.
- 6) No excessive force on traction.
- 7) No special skill is needed.

6. Complications of ventouse:

- 1) Cephalhematoma.
- 2) Ulcers and bruises of fetal scalp.
- 3) Intracranial hemorrhage.
- 4) Injury of Cx and vagina if they are included under the cup during application.
- 5) Remote complications of the mother as prolapse and cx incompetence.

7. Failed ventouse:

Causes:

- 1) Obstetric factors:
 - a. In passage: Cephalopelvic disproportion.
 - b. In passage:
 - Malrotation.
 - Extensive caput.
 - Asynclitism.
 - Anencephaly or hydrocephalus.
 - c. In power:
 - Contraction ring above the head.
 - General anesthesia.
- 2) Technical factors:
 - a. Pump leak.
 - b. Poor cup position.
 - c. Oblique traction.
 - d. Forceful traction.
 - e. Maternal tissue or cord under the cup.

Vaginal Specula

Types of vaginal specula:

- 1) Cusco's self-retaining vaginal speculum.
- 2) Sim's non-self-retaining vaginal speculum.
- 3) Auvard self-retaining vaginal speculum.

1- Cusco's self-retaining vaginal speculum

1. Description:

It is made of 2 blades, posterior one is longer than anterior one because posterior vaginal wall is longer.

2. Types:

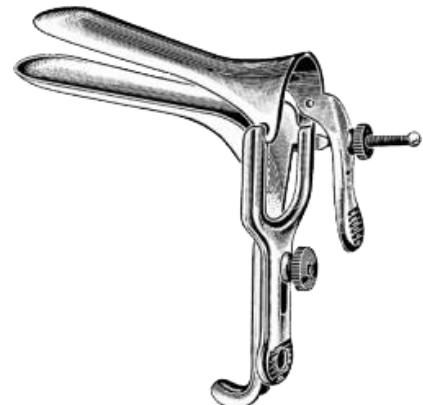
- a. Self-retaining Bivalvular non fenestrated Vaginal Cusco's Speculum.
- b. Self-retaining Bivalvular fenestrated Vaginal Cusco's Speculum.
- c. Graves Speculum: its anterior blade can be removed and the posterior blade can be used as a Sim's speculum.



(a)



(b)



(c)

3. Uses:

- 1) Exposure of Cervix for:
 - a. Inspection.
 - b. Obtaining a biopsy for cytology.
 - c. Colposcopy.
 - d. Minor procedures as HSG, application of IUD, cx. cauterization.
- 2) Exposure of lateral vaginal wall.
- 3) Exposure of ant. and post. vaginal walls (with fenestrated Cusco's Speculum).

4. Application: (without anesthesia)

- 1- Patient is in lithotomy position.
- 2- Sterilized speculum (by autoclave) is lubricated by antiseptic solution.
- 3- Separate labia by thumb and index fingers of left hand.
- 4- Insertion of speculum in A.P. diameter of vaginal opening with slight tilt 45°.
- 5- After 2 cm deep to vaginal opening, rotate the speculum to horizontal plane.
- 6- Open the blades to expose cx, and fix the speculum by its fixation screw.
- 7- When done, remove of speculum by reversal of the application steps.

2- Sim's non-self-retaining vaginal speculum

1. Description:

It's a double ended, grooved speculum.



2. Uses:

- 1) To expose the anterior vaginal wall for examination of vesico-vaginal fistula.
- 2) As a manual vaginal wall retractor.

3. Application: (without anesthesia)

- 1) Patient in Sim's position.
- 2) Speculum is gently inserted into introitus in front of perineum.
- 3) Push it up words to its full length.

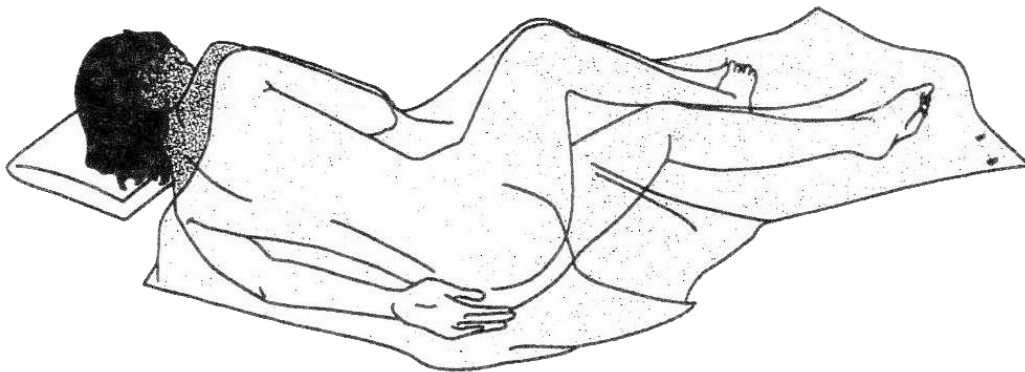
4. Sim's Position:

Description:

- 1) Female lies on her left side near edge of table.
- 2) Her left arm behind her and right arm catch edge of table.
- 3) Her left thigh and leg are semiflexed with right thigh is completely.
- 4) Raised her pelvis by pillow below her waist.

Uses:

- 1) Examination of vesico-vaginal fistula.
- 2) Postpartum perineal examination.
- 3) Per-rectal examination.



Sim's Position

3- Auvard self-retaining vaginal speculum

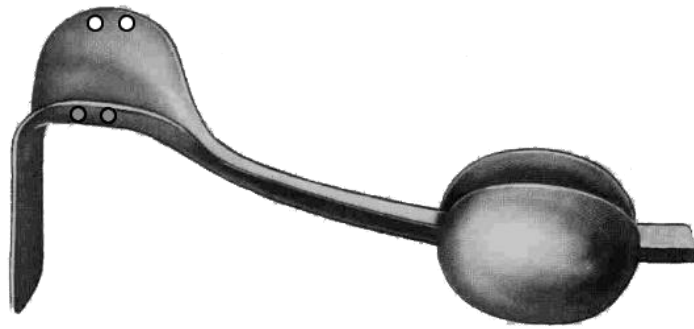
1. Description:

1) Blade:

- Grooved and slightly angulated downwards.
- Widest part of blade contains small holes on each side for fixation of blades.

2) Handle:

- Grooved and act as gutter to pass fluids downwards.
- Act as a weight for retaining of the speculum.



2. Uses:

- 1) Cervical exposure.
- 2) Anterior vaginal wall exposure.
- 3) Fothergill operation.
- 4) Repair of fistula.
- 5) Cervical amputation

3. Application: (under general anesthesia)

To decrease slip of speculum during operation:

- 1- Blade has small acute angle with handle .
- 2- Fixation of blade to patient's skin or towels by stitches through the holes.
- 3- Patient buttocks should be a little beyond the lower edge of operation table.
- 4- Weight of the handle.

4. Advantages:

- 1) Self-retaining.
- 2) Anterior vaginal wall exposure.

5. Disadvantages:

- 1) Laceration of posterior vaginal wall due to over stretch of soft tissues.
- 2) Doesn't expose the posterior vaginal wall.

Vulsellum forceps

1. Types:

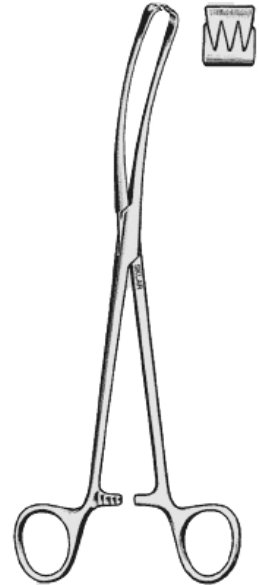
- 1) Single sharp toothed vulsellum (tenaculum) either curved or straight.
- 2) Multiple rat teeth vulsellum either curved or straight.



**Vulsellum Forceps
(Single toothed)**



**Vulsellum Forceps
(With two into three teeth)**



**Vulsellum Forceps
(With three into four teeth)**

2. Uses:

- 1) Fixation of cervix for:
 - a. Uterine sound insertion.
 - b. IUD insertion.
 - c. HSG.
 - d. Hydrotubation.
 - c. Insufflation.
- 2) During vaginal operations:
 - a. Dilatation and curettage (D&C).
 - b. Evacuation and curettage (E&C).
 - c. Repair of prolapse.
 - d. In vaginal myomectomy to grasp and twist a fibroid polyp.
- 3) Vulsellum test to detect the degree of uterine prolapse.

3. Contraindications:

- 1) Pregnant uterus.
- 2) Suspicion of malignancy

4. Complications:

- 1) Cervical lacerations.
- 2) Infection.
- 3) Bleeding.

Uterine Sound

1. Description:

- 1) The sound is made of either metal Copper (malleable مرن) or stainless steel (rigid).
- 2) It is graduated in cm or inches by written numbers or by beading.
- 3) It is composed of tip, shaft and handle.
- 4) It is 3-4 mm in diameter which equals the internal os diameter of cx.



2. Uses:

- 1) Measuring of cervical and uterine length.
- 2) Diagnosis of uterine hypoplasia as the following:

$$\text{Normal index (1)} = \frac{\text{Total Uterine length} - \text{Cervical length}}{\text{Cervical length} \times 2}$$

- 3) Before starting any uterine operation done vaginally.
- 4) Diagnosis of uterine direction especially in obese females.
- 5) Prevention of cervical stenosis after cervical cauterization.
- 6) Diagnosis of internal os condition:
 - a. If normal: pass of sound freely.
 - b. If stenosed: pass with difficulty.
 - c. If incompetent: no internal os resistance.
- 7) Intra uterine palpation:
 - a. Differentiation between cervical and uterine polyp.
 - b. Diagnosis of intra uterine adhesion (multiple resistances).
 - c- Diagnosis of missed IUCD (click sound).
 - d- Differentiation between chronic uterine inversion and uterine fibroid.
 - e- Diagnosis of uterine perforation.
- 6- Probe test: for test friability of endocervical tumor.
- 7- Click test: in small vesico-vaginal or recto-vaginal fistulae.

3. Technique of uterine sounding:

- 1) PV examination.
- 2) Aseptic technique.
- 3) Expose cx. by speculum.
- 4) Catch anterior lip of cx. by vulsellum.
- 5) Introduction of sound gently by thumb and index fingers only holding it.

4. Complications:

- 1) Infection is the commonest complication.
- 2) Uterine perforation is the most serious complication.
- 3) Shock.
- 4) Abortion on pregnant uterus.

Cervical Dilators

1. Description:

- Single or double ended.
- Its size equals the diameter of the dilator in mm.

2. Types:

- 1) Hegar: uniform thickness.
- 2) Fenton: tapering gradually towards tip.



Double ended Hegar dilator



Double ended fenton dilator



Single ended Hegar dilator



Single ended fenton dilator

3. Uses:

- 1) step before other operations:
 - a. Cx. operations:
 - i. Fothergill's operation.
 - ii. Cx. cauterization.
 - b. Uterine operations:
 - i. Polypectomy.
 - iv. Endometrial curettage.
 - ii. Radium application.
 - v. Evacuation.
 - iii. Operative hysteroscopy.
 - c. Fallopian tube operations:
 - i. HSG when using large cannula.
 - ii. Tubal canulation through hysteroscopy.
- 2) Therapeutic uses: (Dilatation only)
 - a. Treatment of spasmodic dysmenorrhea.
 - b. Treatment of acquired or congenital cx. stenosis.
 - c. Drainage of pyometra or hematometra.
- 3) Diagnostic uses:

Hegar test: for diagnosis of recurrent abortion due to cx. incompetence.

4. Complications:

- 1) Infection is the most common complication.
- 2) Perforation.
- 3) Cx. laceration.
- 4) Cx. incompetence.
- 5) Neurogenic shock.

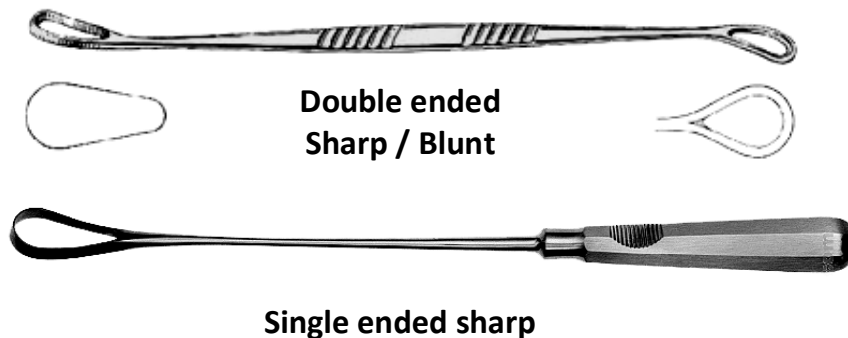
5. Contraindications:

- 1) Application without anesthesia.
- 2) Infection.
- 3) Pregnancy.

Uterine curettes

1. Types of endometrial curettes:

- 1) Sharp (single or double ended): for non-soft uterus.
- 2) Blunt (single or double ended): for soft uterus.



2. Uses:

- 1) Diagnostic purpose:
 - a. Detection of ovulation.
 - b. Detection of endometrial hormonal pattern (proliferative, secretory, atrophic, hyperplastic).
 - c. Diagnosis of T.B.
 - d. Diagnosis of malignancy.
- b) Therapeutic purpose:
 - a. Endometrial curettage after evacuation (abortion).
 - b. Treatment of post abortive or secondary PPH.
 - c. Treatment of abnormal uterine bleeding.
 - d. Removal of intrauterine foreign bodies e.g. IUCD.

3. Complications:

- 1) Infection.
- 2) Perforation.
- 3) Bleeding.
- 4) Asherman's syndrome.
- 5) Amenorrhea.

4. Causes of bleeding during or after curettage:

- 1) Retained products of conception.
- 2) Cx. laceration.
- 3) Uterine atony.
- 4) Perforation.

Novak's curette

1. Description:

- It is a metal instrument with curved end and serrated margin.
- It is introduced into uterine cavity without anesthesia as its diameter is equal to the diameter of uterine sound.
- There is a thumb rest near its outer end to know the direction of its curved upper end.



2. Uses:

- 1) Premenstrual endometrial biopsy for diagnosis of:
 - a. Ovulation.
 - b. Luteal phase defect.
 - c. T.B. endometritis.
- 2) Endocervical biopsy in cancer cx.
- 3) Removal of missed IUD from uterine cavity.

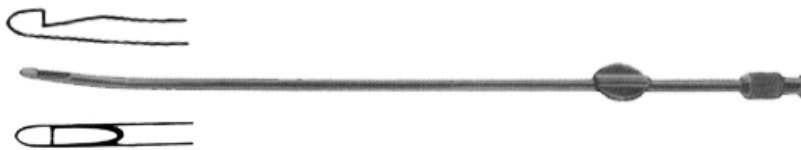
3. Advantages:

- 1) Can be used without anesthesia.
- 2) Can be done as an office technique.

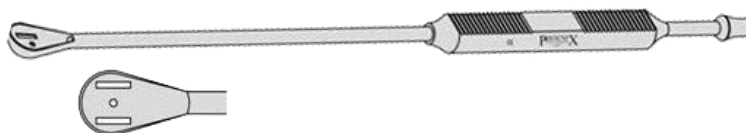
4. Complications: Same as uterine sound.

Randall's curette

It is the same instrument but its margin is sharp and not serrated.



Rheinstadter's curette



1. Uses:

Removing of decidua after evacuation in a case of abortion.

3. Advantages:

- 1) Increase uterine contraction by warm irrigation.
- 2) Antiseptic solution may be added to irrigating fluid.
- 3) Removing of intrauterine derbis.

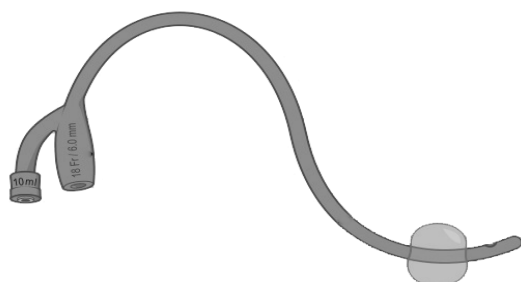
Urinary Catheters

1. Types:

- 1) Metal catheters either straight or S-shaped.
- 2) Rubber catheters.
- 3) Non-self-retaining plastic catheters (Nealaton catheter).
- 4) Self retaining rubber catheter (Foley's catheter).



Rybber catheter



Foley's catheter



S-shaped metal catheter

2. Uses:

A) Gynecological:

I- Diagnostic:

1. Collection of sterile sample of urine for bacteriological examination.
2. Diagnosis of vesico-vaginal fistula by click test.
3. Methylene blue test.
4. Differentiation between full bladder and pelviabdominal mass.
5. Differentiation between cystocele and anterior vaginal wall cyst.

II- Perioperative bladder evacuation:

1. Before any major gynecological or obstetric operation.
2. Postoperative bladder drainage.
 - a) After major gynecological or obstetric operation.
 - b) After vaginal surgery.
 - c) After repair of vesico-vaginal fistula for 2- 3 weeks.

III- Relief of urinary retention resulting from:

1. Anterior wall cervical fibroid press on urethra.
2. Incarcerated ovarian cyst (dermoid cyst).
3. Fixed gravid RVF at end of 12 w.
4. Some neurological diseases.

B) Obstetrical:

I- During labor if patient can't pass urine by herself in 1st stage.

II- Before any obstetric intervention as forceps or C.S. in 2nd stage.

III- Atonic PPH in 3rd stage of labour.

IV- Before correction of an incarcerated RVF gravid uterus.

3. Complications:

- 1) Introduction of infection (most common).
- 2) Injury of urethra or bladder, especially by metal catheter.

Ring Forceps

1. Features:

- Its Jaws (ends) are flat.
- There is a lock at its handle.



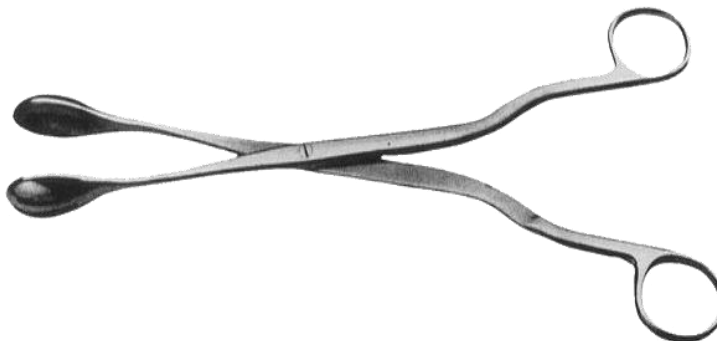
2. Uses:

- 1) Traction on pregnant cx. for D&C.
- 2) Evacuation of uterine content when ovum forceps is not available.
- 3) Can be used as polypectomy forceps.

Ovum Forceps

1. Features:

- Its Jaws (ends) are concaved and cupped.
- There is no lock at its handle.



2. Uses:

Evacuation of uterine contents of abortion.

Screw (Wilkinson) cannula

1. Description:

- It is a metal self-retaining cannula with spiral cone.



2. Uses:

For HSG.

Insufflation (Bonney's) cannula

- It is a cannula with fixed metal cone.



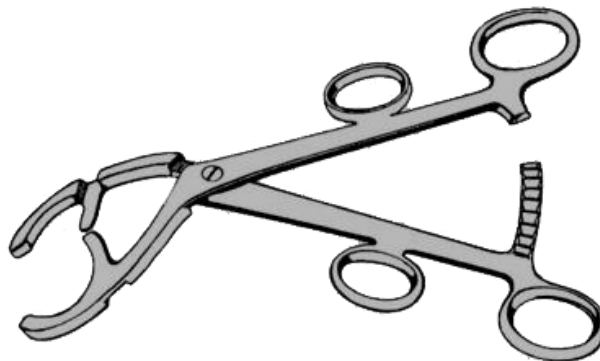
Doyen's retractor

- It is a non-self-retaining abdominal wall retractor.

Uses: Retraction of the urinary bladder in gynecological operations.



Bonney's myomectomy clamp



Uses:

Compression of the uterine arteries just above the cx. during myomectomy operation.

Pinard Stethoscope

1. Description:

- Cone shaped instrument with wide based end which is flat over the abdominal wall.
- The other end of cone is narrow and is fitted to the ear.
- It may be wooden or metal.

2. Uses:

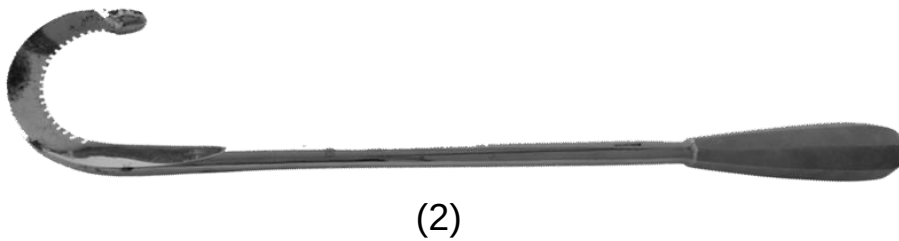
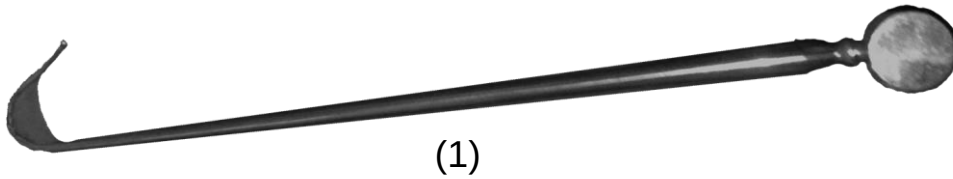
- For auscultation of fetal heart sounds.



Decapitation hook

1. Types:

- 1) Decapitation hook with knife (Jardine's hook).
- 2) Decapitation hook with serrations (Ramsbotham's hook).



2. Indications:

- 1) Neglected shoulder.
- 2) Double headed monsters.
- 3) Locked twins.

3. Complicationss:

Maternal injury.

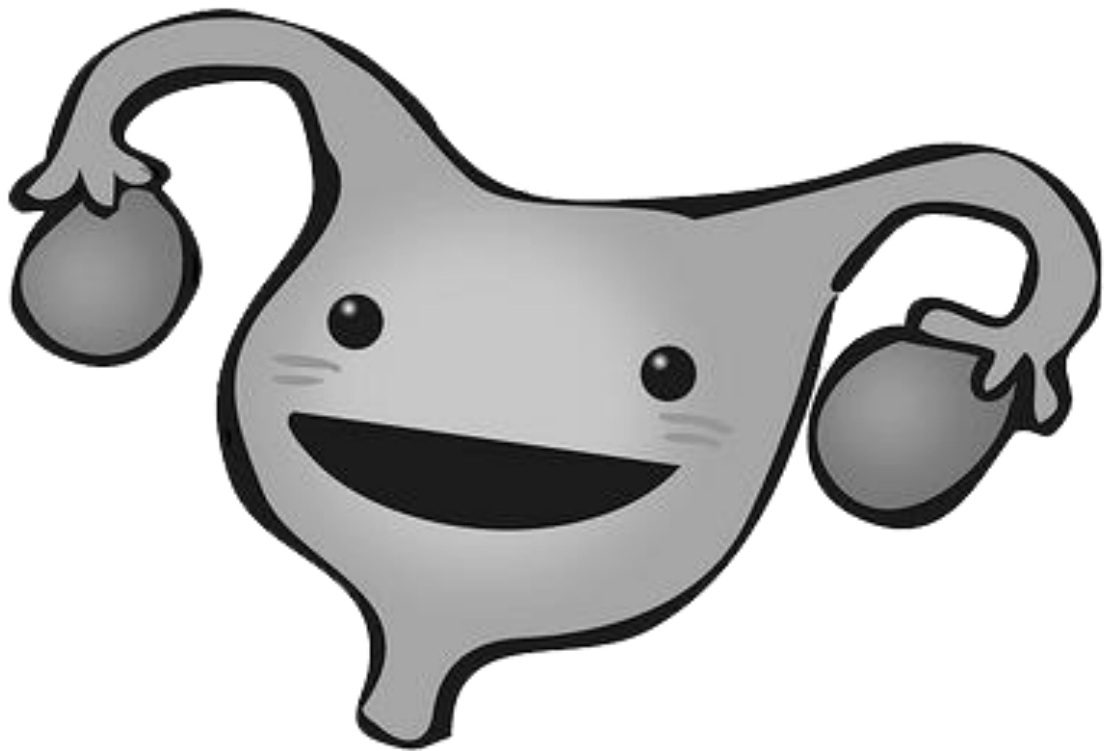
Blunt hook



Uses:

Groin traction on a dead fetus in breech presentation.

2-
HISTOSALPINGIOGRAM
(H S G)

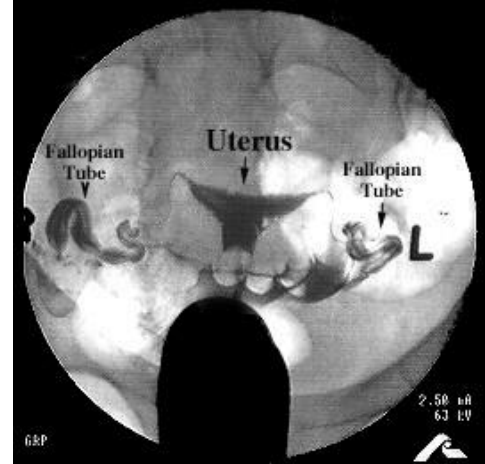


بالنسبه لـ HSG

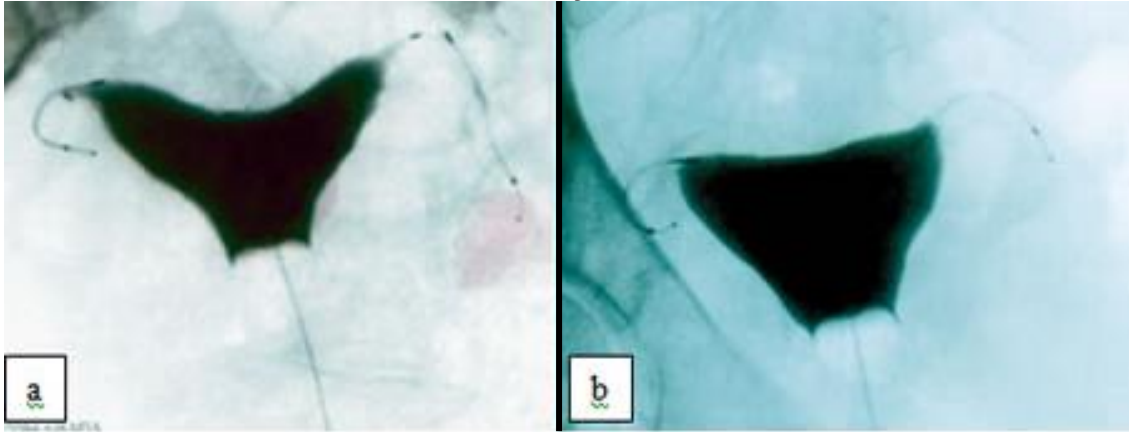
دى الصور اللى موجوده فى الكليه و اللى علينا ان شاء الله بس

أول حاجه الـ Normal HSG

كل حاجه Patent و الـ Immediate spell نازل من الانابيب



٢. normal برضو بس بنزود Under screen
 فى التكنيك دا الرحم بياخد اللون الاسود و الـ pelvis بياخد اللون الابيض
 عكس الـ x ray يعنى



تانى حاجة مشاكل فى الـ Uterus

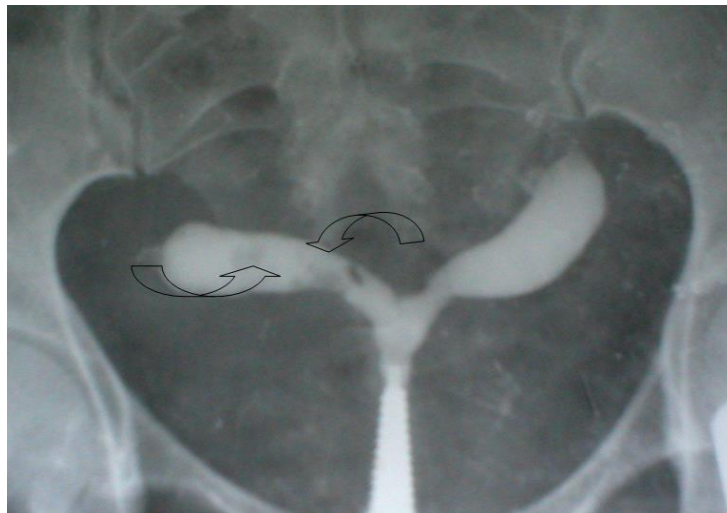
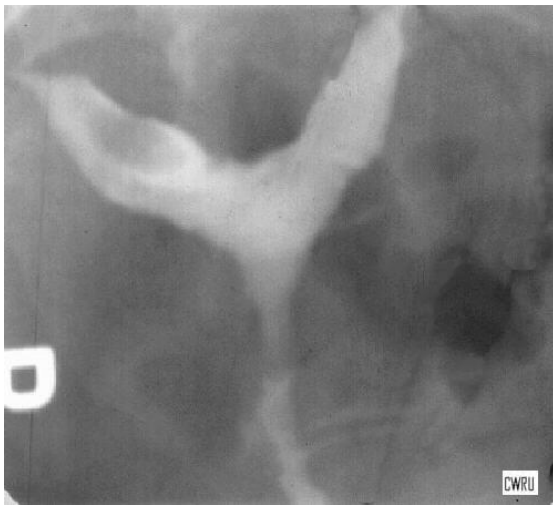
١. الـ Uterus ليه 2 Cavities

الكومنت اللى بنقوله هو

HSG show 2 separate horns for D.D

a. subseptate

b. bicornuate



٢. لو الـ Ut ليه horn واحد

HSG showing unicorned ut.

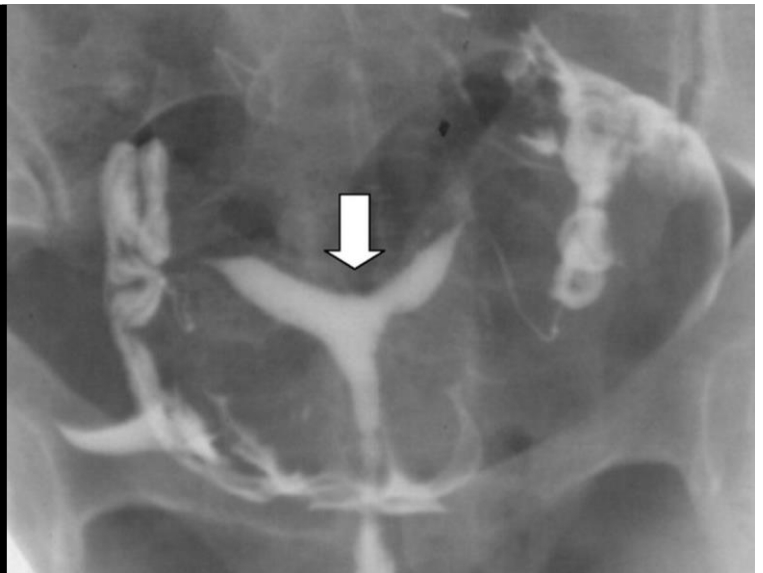


٣. حاجات فى الـ Fundus

لو كل الـ Fundus نازل لتحت يبقى arcuate uterus
ف الحاله دى هو تجويف واحد للرحم مش اتنين عشان محدش يتلخبط مع الـ 2 horns

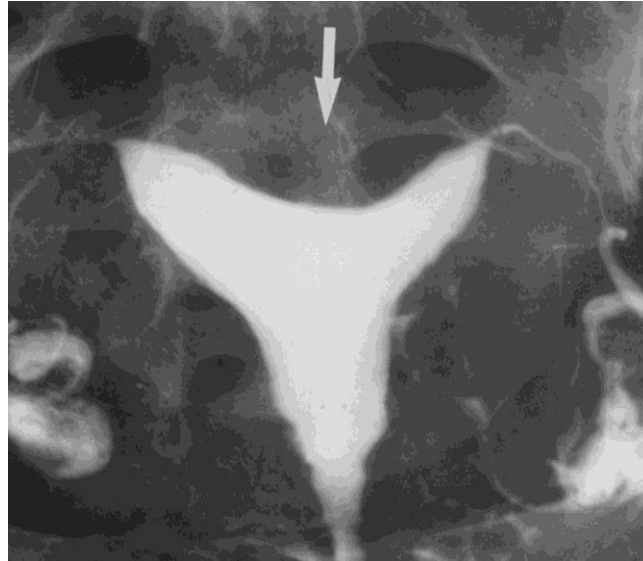


دى الـ Arcuate



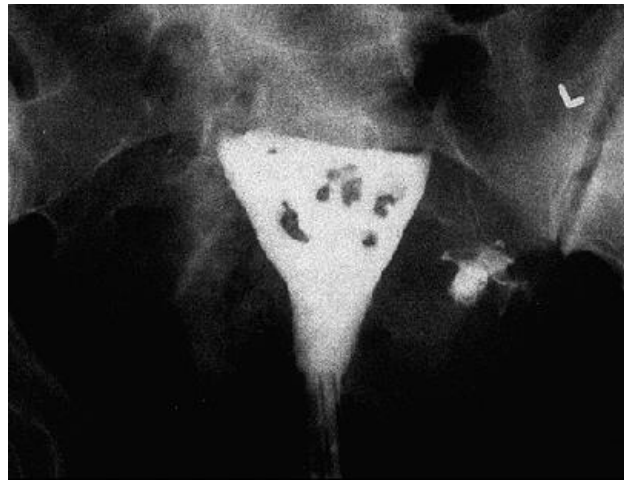
دى الـ 2 horns

Fundal defect اما ال
جزء من ال Fundus نازل لتحت مش كله زى اللى فوق



Uterine filling defects ال . ٤

1- HSG show multiple filling defects (Asherman \$)
اللى هو ال fibrosis اللى بين جدران الرحم

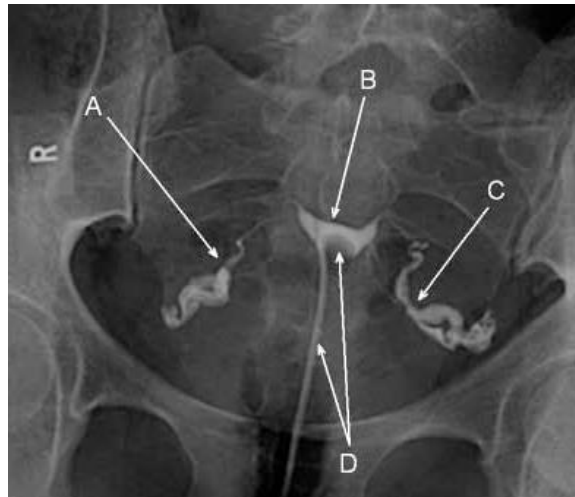


2- HSG showing irregular uterine filling defect



3- HSG showing uterine filling defect

بس مش مهمة



تالت حاجة مشاكل فى الـ Tubes

١. ان الـ Tubes مش باينه

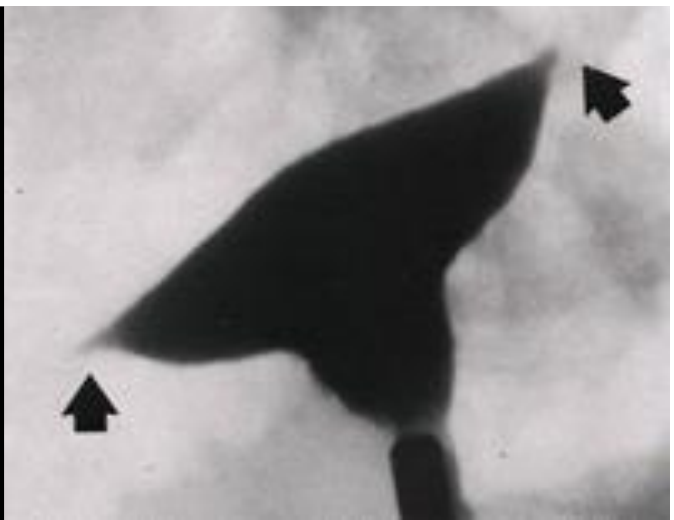
ودى بنقول فيها

Non visualized tube for D.D

a. spasm

b. congenital absence

c. bilateral corneal obstruction

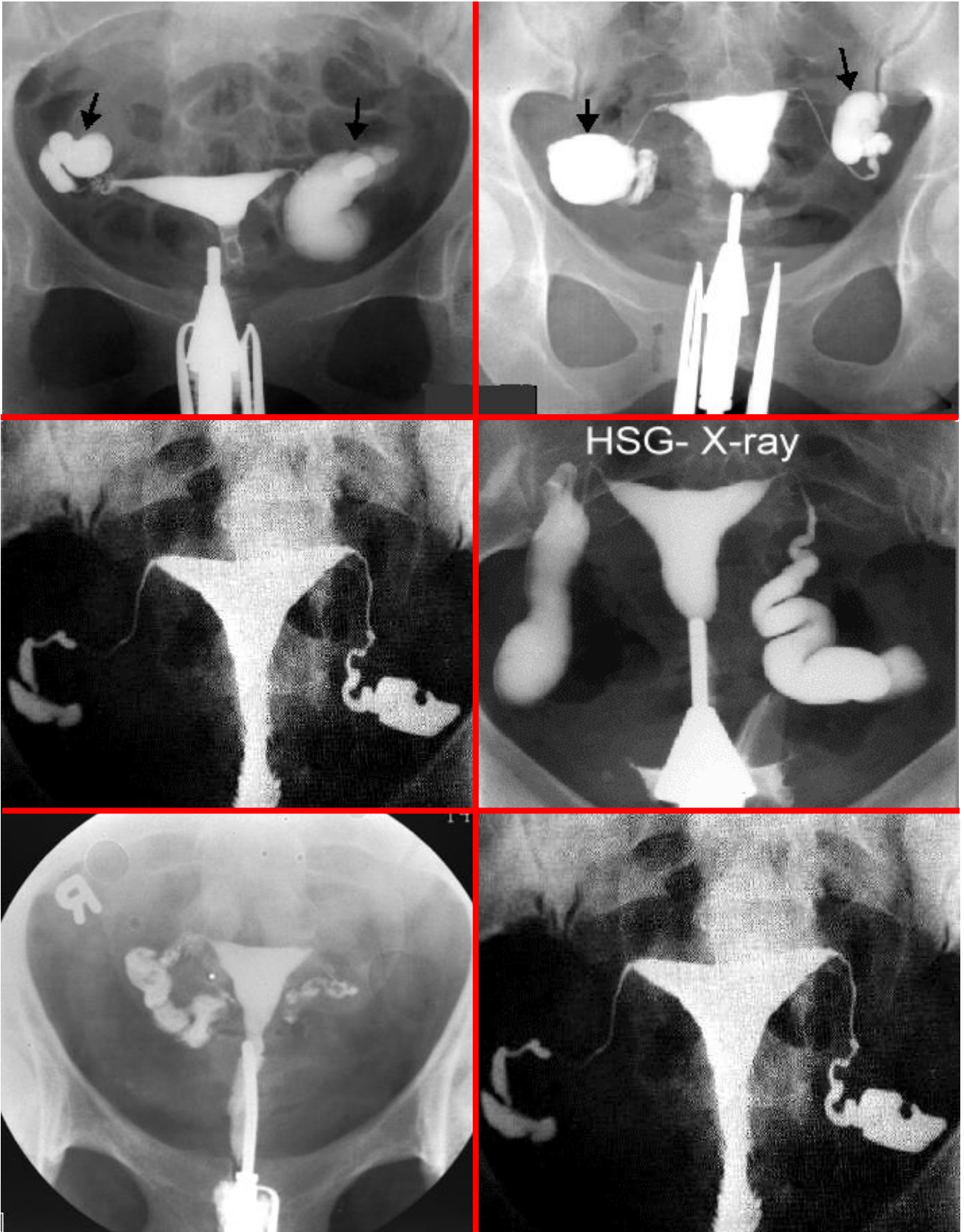


و دى زيها بس under screen

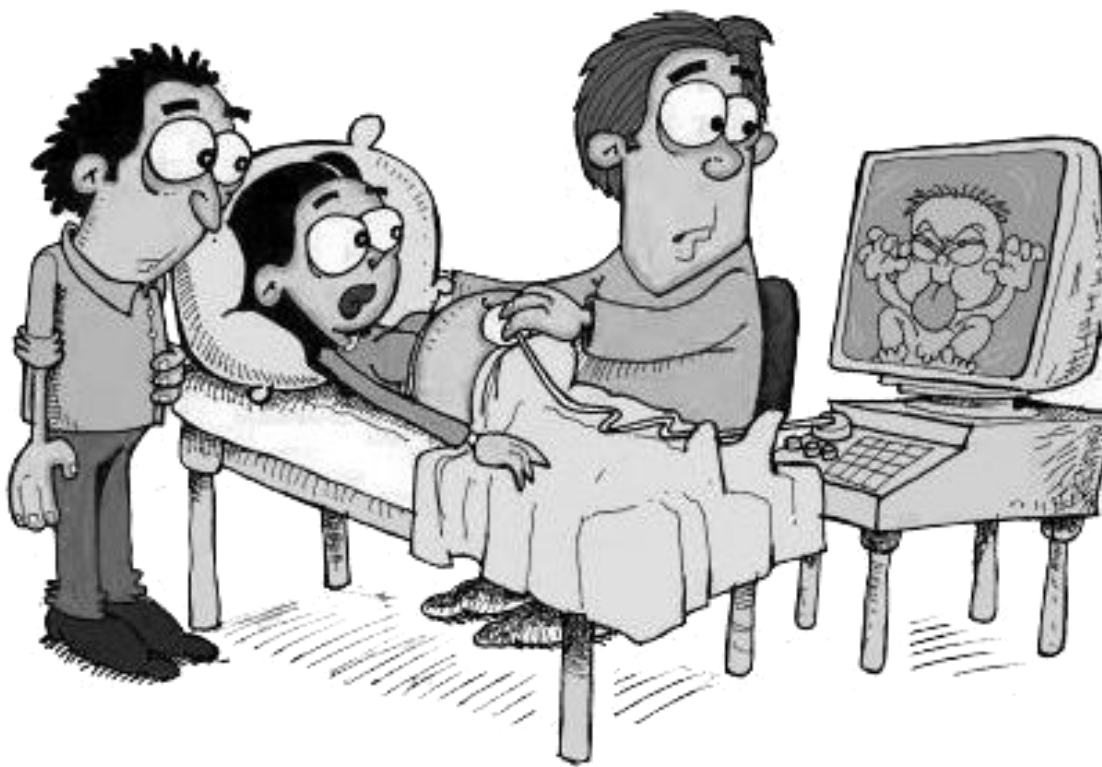
٢. ان ال Tubes تبقى distally dilated

ودى بنقول فيها

HSG showing bilateral hydrosalpinx
كلهم مفهوش ال immediate spell اللى موجودة فى ال Normal HSG



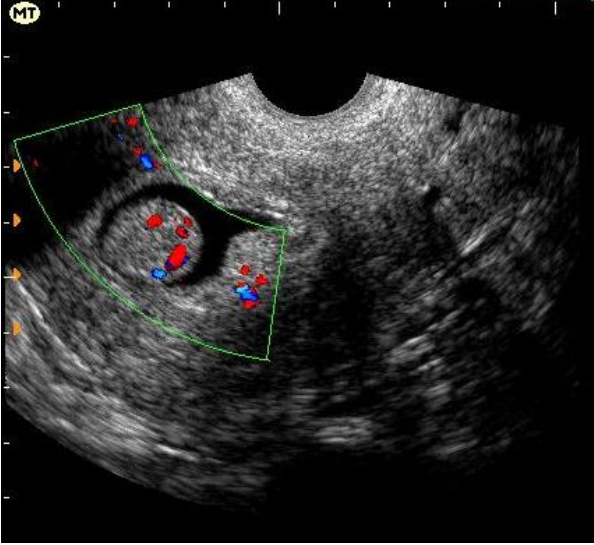
3- ULTRASONOGRAPHY



بالنسبة لـ Ultrasonography

فيه صور بالـ (Colored Doppler) ... ودول صورتين بس ... للحاجات اللي فيها دم

Doppler U.S shows ...



1. Vascular bed of placenta



2. Fetal circulation
واللي تحت دي الـ fetal heart beats

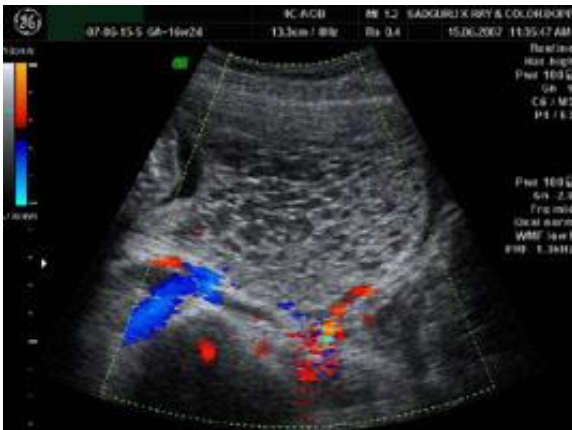
وعندنا بقى الـ U.S العادى اللي مش بالالوان

نيجي لصور الـ Vesicular mole

وعندنا منها نوعين

الـ partial : ودا بيكون فيه fetal tissue ، والـ Complete : ودا مبيكونش فيه fetal tissue

1. Doppler U.S shows snow storm appearance (Complete Vesicular Mole)



2. U.S shows Partial Vesicular Mole.



واضح هنا الـ snow storm واللى جوا الـ sac دا الـ fetus

فيه بقى صورة قريبه للـ Vesicular Mole واللى هى الـ Endometriosis

U.S shows smoke powder appearance (Endometriosis)



بتكون على شكل نقط بيضاء خفيفه كذا وسط فراغ اسود قال يعنى شكل الـ Smoke powder

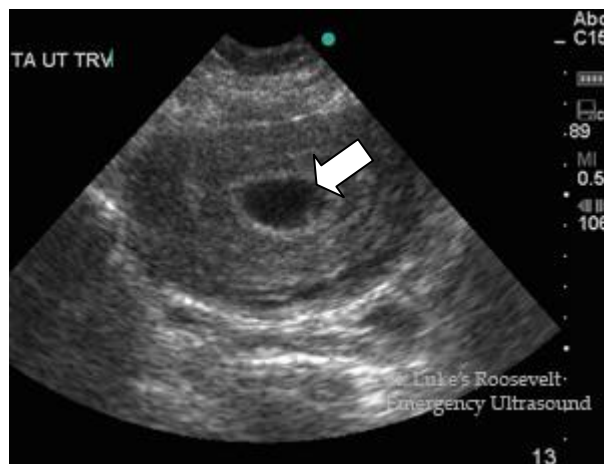
فيه صور بقى للـ Gravid Uterus

نبدأ بالـ U.S of normal uterus

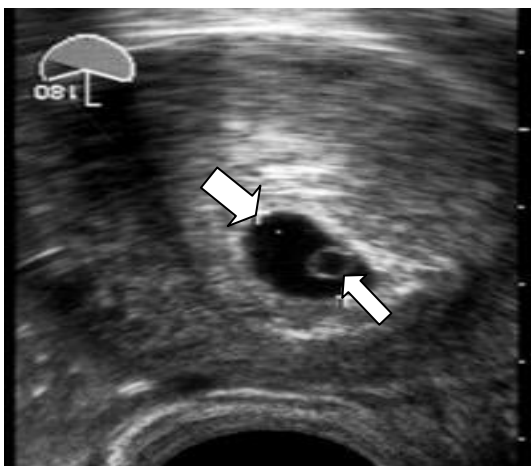


نيجى لصور الـ Gravid Uterus

1. U.S shows gravid uterus contains gestational sac



2. U.S shows gravid uterus with gestational sac contains yolk sac



زى اللى فوق بالضبط بس فيه دايره ف النص كدا اسمها الـ yolk sac

3. U.S shows gravid uterus with gestational sac contains yolk sac



هنا الـ yolk sac كبرت شويه وبقت embryo ... وبتميزه من الملامح والتقسيم بتاعته

4. U.S shows normal fetus with head and abdomen taken with coronal section in breech presentation.

وقلنا عليه coronal section علشان وش الـ fetus ناحيتي

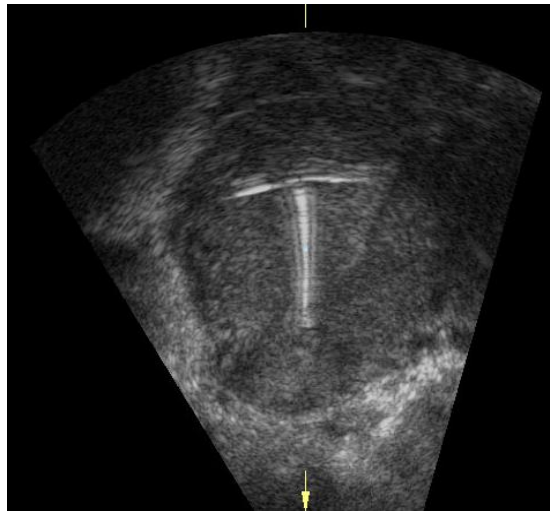


5. U.S shows normal fetus with head and abdomen taken with longitudinal section in cephalic presentation.

وقلنا عليه longitudinal section علشان وش الـ fetus ل فوق



1. Intra uterine IUD (Copper T)

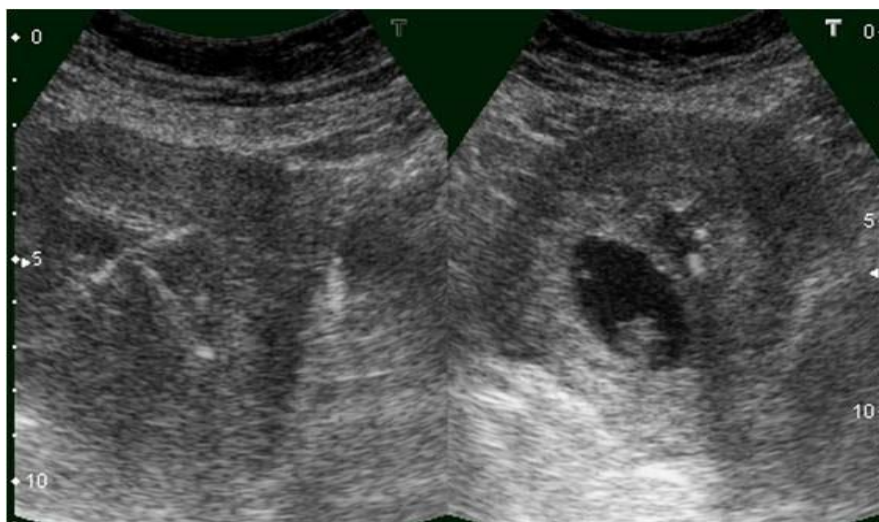


2. Trans-abdominal U.S Intra uterine contraceptive device



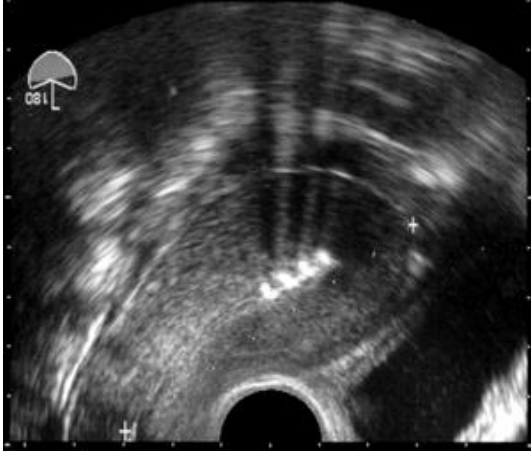
ودا مكتوب عليه الحل يعنى ، وقولنا Trans-abdominal U.S عليه مادام المثانه ظاهره

3. U.S shows gravid uterus contains gestational sac on top of IUD



واحدته حملت على اللولب اللي مركباه

1. Lippes loop



بيكون عامل فى الـ U.S زى ماسورة التكعيب



دا شكله فى الحقيقة

.....
نيجى بقى لصور التوائم

١. Twins كل واحد فيهم فى Sac لوحده فى مراحل تطور مختلفه :

1. U.S shows gravid uterus contains 2 gestational sacs



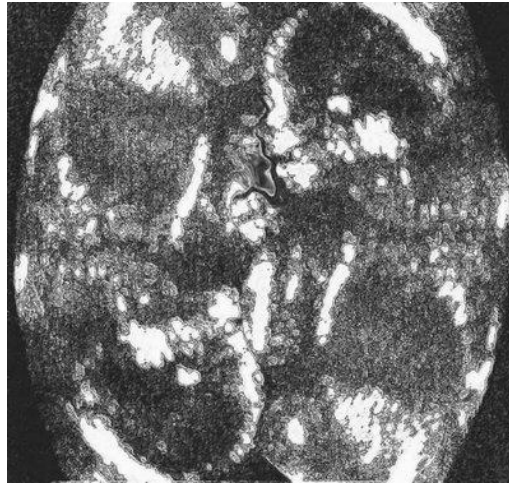
بنقول gestational sac بس كدا لما يكون الـ fetus مش باين منه اى تفاصيل

2. U.S shows gravid uterus with 2 gestational sacs contains fetal nodes



قلنا عليه fetal node لانه كبر شويه وبانله ملامح وتقاسيم

3. U.S shows twins with 2 gestational sacs.



كبروا اكثر وبقوا كاملين

4. U.S of gravid uterus shows 2 gestational sacs with 2 heads of twins



٢. Twins في Sac واحدة في مراحل تطور مختلفه :

1. U.S of gravid uterus shows uniovular twins with 1 gestational sac



لازم نقول معاها uniovular twins ومقولناش عليها fetal nuds علشان مش باينلها تقاسيم ولا ملامح

2. U.S of gravid uterus shows uniovular twins with 1 gestational sac and 2 fetal nodes



هنا بانئت تقسيم الجسم والراس والاطراف فقولنا عليه fetal nodes

3. U.S of gravid uterus with 3 gestational sacs (triplet)



فيه صورة ممكن تلخبط مع الـ gestational sac



دا منظر الـ dermoid cyst وما فيش جواها اي حاجه تدى على شكل جنين

١. مشكله فى ال fetus نفسه

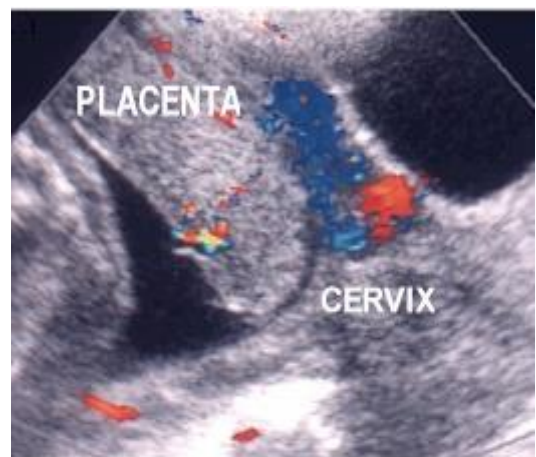
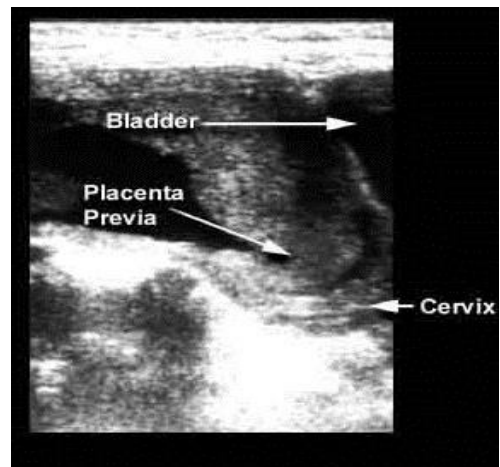


Anencephaly

٢. مشكله فى ال placenta واللى علينا منها حاجتين:

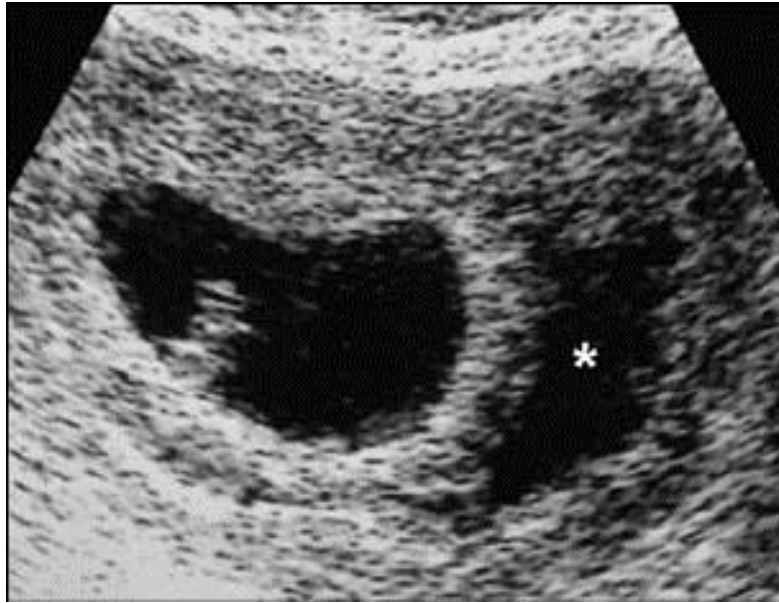
a. Placenta Previa

و دى اى صوره مكتوب عليها ال Cervix أو متشاور عليه فيها علشان يوضح ان ال placenta وصلت لهننا يعنى



b. Decidual Separation

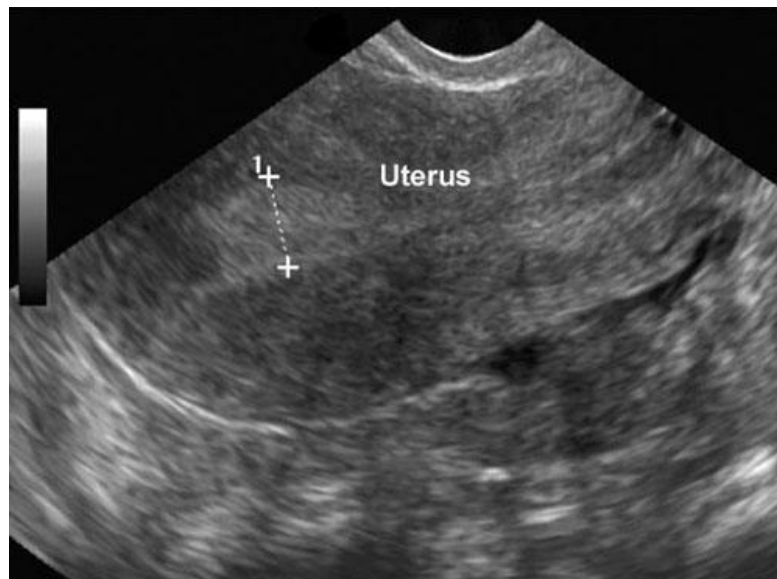
U.S of gravid ut. shows gestational sac contains fetal nod with decidual separation (habitual abortion)



والنجمة بتشير لمكان النزيف الى حصل نتيجة الـ decidual separation
وقلنا decidual ومقولناش placental لأن واضح من الصورة ان الـ fetus الى الـ Sac لسا صغير
اخره يعنى fetal node مكملش ١٢ اسبوع ، كذا تبقى الـ placenta لسا متكونتش واللى موجود decidual

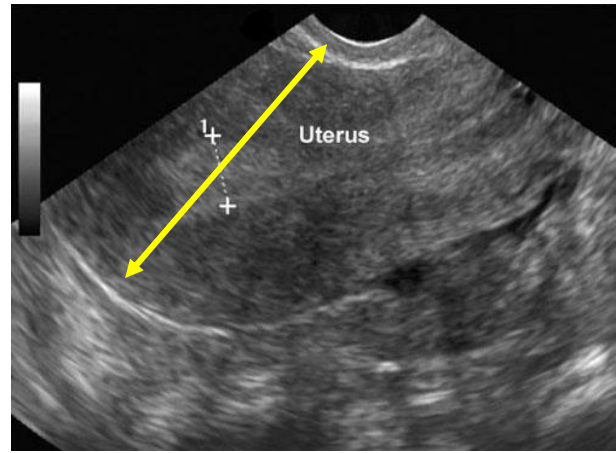
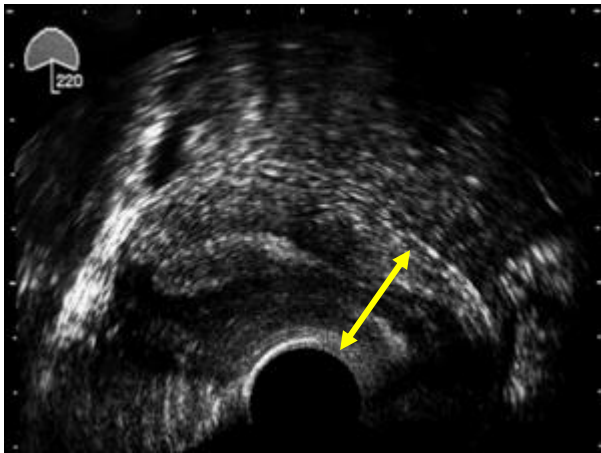
٣. مشكله فى الرحم نفسه :

a. Endometrial hyperplasia, intramural fibroid



الحتة الى عليها النقط دى هى الـ fibroid ولونها أبيض علشان بدأ يحصل فيها calcification

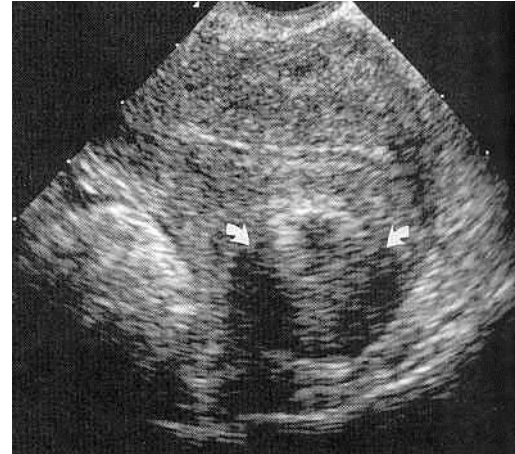
لاحظوا الفرق بين الـ endometrial hyperplasia وبين الـ normal endometrium



b. Fibroid



Uterine

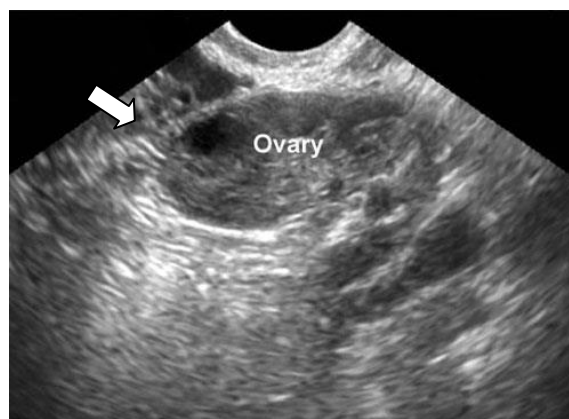


Intramural

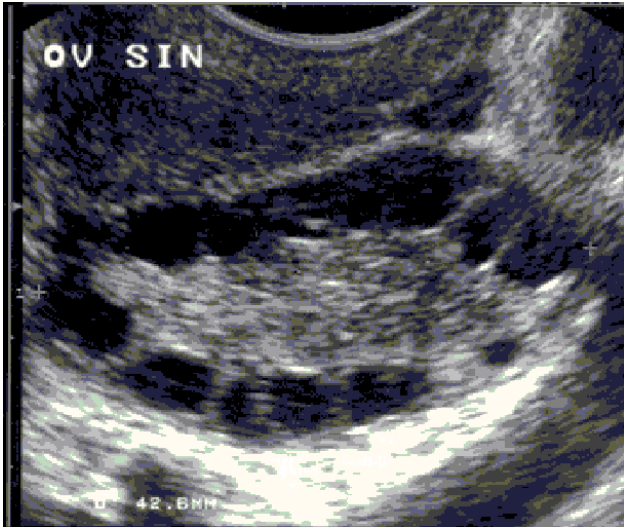
وبيكون متشاور عليهم بأسهم ومكتوب عليهم بس بنعرفه عن طريق ان الـ ecogenicity بتاعته ، بتكون اقل من جدار الرحم السليم ، يعنى بتدى على اسود

٤. الـ Ovary ومشاكله :

1. Normal ovary with Mature Graafian Follicle.

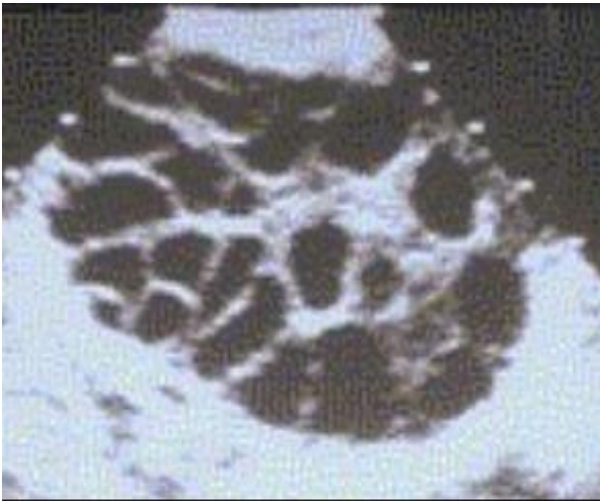


2. Poly cystic ovary



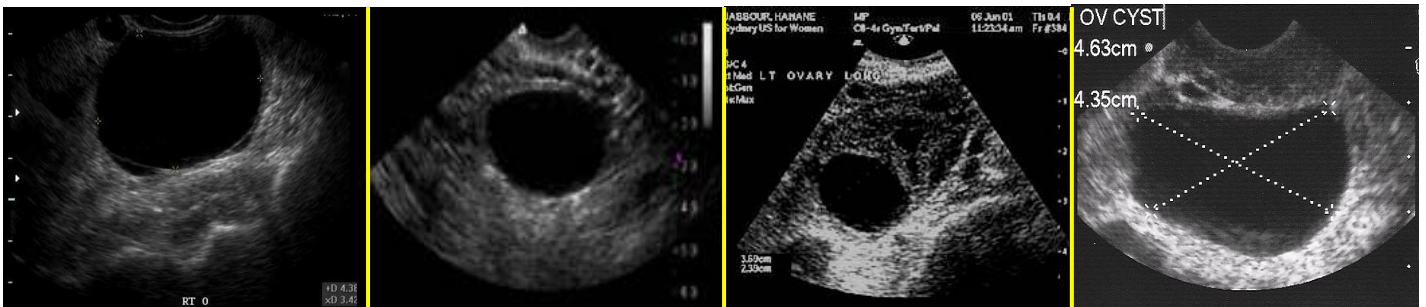
منظر العقد ... ودا ان شاء الله سهل

3. Ovarian hyper stimulation syndrome



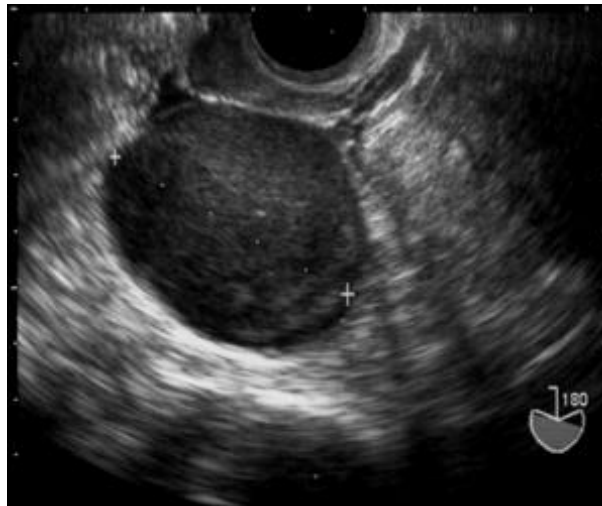
دا بقى مش عقد علشان متلخبطش ... دى mature gravian follicles كثير ، اكثر من ١٠
وبتكون نتيجة لاستخدام الـ clomide

4. Simple ovarian cyst



وبنعرفه من انه كيس فيه ماء وكبير ولونه اسود
وقولنا simple لأن الماء اللي فيه مش معكر والسواد جواها clear
وأحيانا بيكون مكتوب على الصورة ان دا ovarian cyst

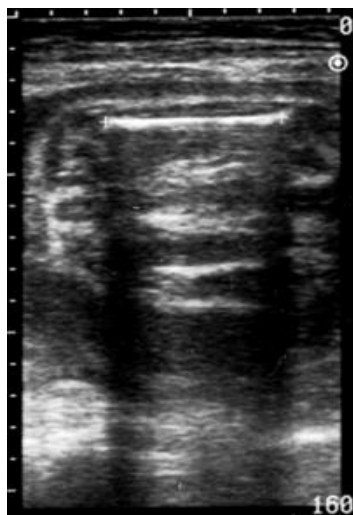
5. Ovarian mass in douglas pouch for D.D (chocolate cyst)



دى بقى السواد اللى فيها مش clear كدا لان دى مش cyst اصلا دى mass فى الـ douglas pouch
لأن الـ ovary بيكون متجه لورا ناحيتها

فيه بقى شوية صور للـ fetal assesment

1. U.S showing femur length



2. U.S show measurement of biparital diameter (BPD)



4- JARS



بالنسبة للجارات فاحنا عندنا ٥ جارات بينزل منهم ٤ بس
اللى أخذناهم فى الراوند

ازاى بنقول الكومنت على الـ Jar:

1. Jar shows (Uterus/Vagina/Ovary)

على حسب اللى فيه

2. Removed by (transabdominal/transvaginal)

نقول اتشال ازاى يعنى

3. showing (lesion)

(Jar 1)



1. Jar contains uterus, 2 tubes and 2 ovaries.
2. Removed by total abdominal hysterectomy.
3. Showing subserous cx fibroid.

(Jar 2)



1. Jar contains uterus, 2 tubes and 2 ovaries.
2. Removed by total abdominal hysterectomy.
3. Showing multiple uterine fibroid.

(Jar 3)



1. Jar contains uterus, 2 tubes and 2 ovaries.
2. Removed by total abdominal hysterectomy.
3. Showing bilateral ovarian cysts.

(Jar 4)

الوحيد اللى فى برطمان وغطاه اصفر



1. Jar contains uterus and Vagina.
2. Removed by transvaginal total hysterectomy.
3. Showing supravaginal elongation of cx (uterine prolapse).

(Jar 5)



Partial vesicular mole

ودا بتلاقي فيه embryo صغير وطالع منه umbilical cord
وغالبا مابينزلش